

Liquefied Natural Gas

Senate Budget Hearing

March 6, 2006

Joseph Desmond

Chairman

California Energy Commission

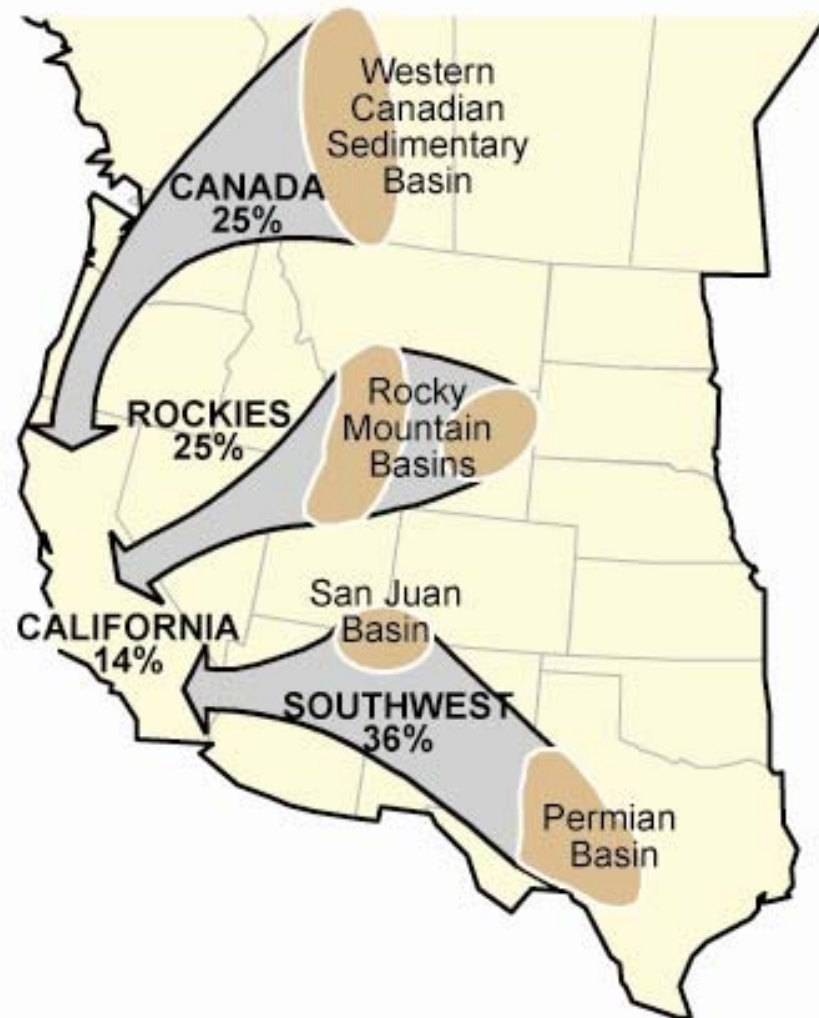
Presentation Topics

- California's Natural Gas Situation
- Overview of LNG Proposals
- LNG Permitting Process/State Role
- LNG Issues Under Discussion
 - Critical Energy Infrastructure Information (CEII)
Sensitive Security Information (SSI)
 - Natural Gas Quality
 - Greenhouse Gas Emissions
 - International Trade
 - Managed Access
- 2006 LNG Work Plan

California's Natural Gas Situation

- California imports 86% of its natural gas
- U.S. and Canadian sources expected to decline in future
- California demand expected to grow
- LNG would provide another source of natural gas
- Delivery of gas from a west coast terminal could hedge against supply/price problems in rest of country (e.g., hurricanes)

California Sources of Natural Gas



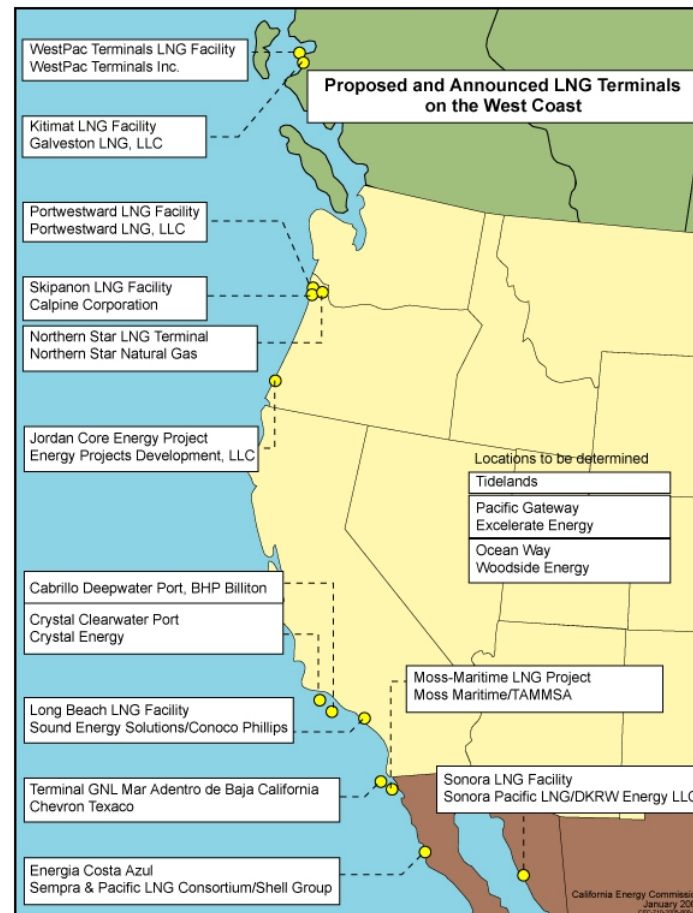
Overview of CA LNG Proposals

- California Projects Proposed
 - Port of Long Beach (onshore): Draft EIS/EIR out October 2005. Final EIS/EIR due Spring 2006
 - Cabrillo Port (offshore Ventura Co.): Recirculated Draft EIS/EIR due early 2006
 - Clearwater Port (offshore Ventura Co.): application expected to be complete early 2006
 - Ocean Way (offshore So. California): Woodside announced project January 2006. No details/application
 - Pacific Gateway (offshore No. California): announced by Excelerate, application expected 2006

Other Proposed West Coast LNG Terminals

- 2 Onshore Terminals in British Columbia
 - Only 1 (Kitimat) is active. Construction could begin in 2006.
- 4 Onshore Terminals in Oregon
 - Only 1 currently under FERC review; 2 others may start FERC review in 2006
- 3 Terminals in Baja California
 - Costa Azul terminal (onshore) under construction
 - Other 2 (offshore) with some permits received

West Coast LNG Projects



Permitting Onshore vs. Offshore

Different Federal Laws

- Onshore
 - FERC
 - Exclusive jurisdiction
 - Limited state decision making
 - Land lease decisions by port/city
- Offshore
 - MARAD / USCG
 - Joint jurisdiction
 - Gov decision at end
 - Land lease decisions by state

State Role in LNG Permitting

- State and federal agencies coordinate via LNG Working Group
- Governor can veto offshore terminals
- Environmental Document (EIR) prepared pursuant to CA Environmental Quality Act
 - State Lands Commission is state lead agency for offshore terminals
 - Port of Long Beach is state lead agency for onshore terminal

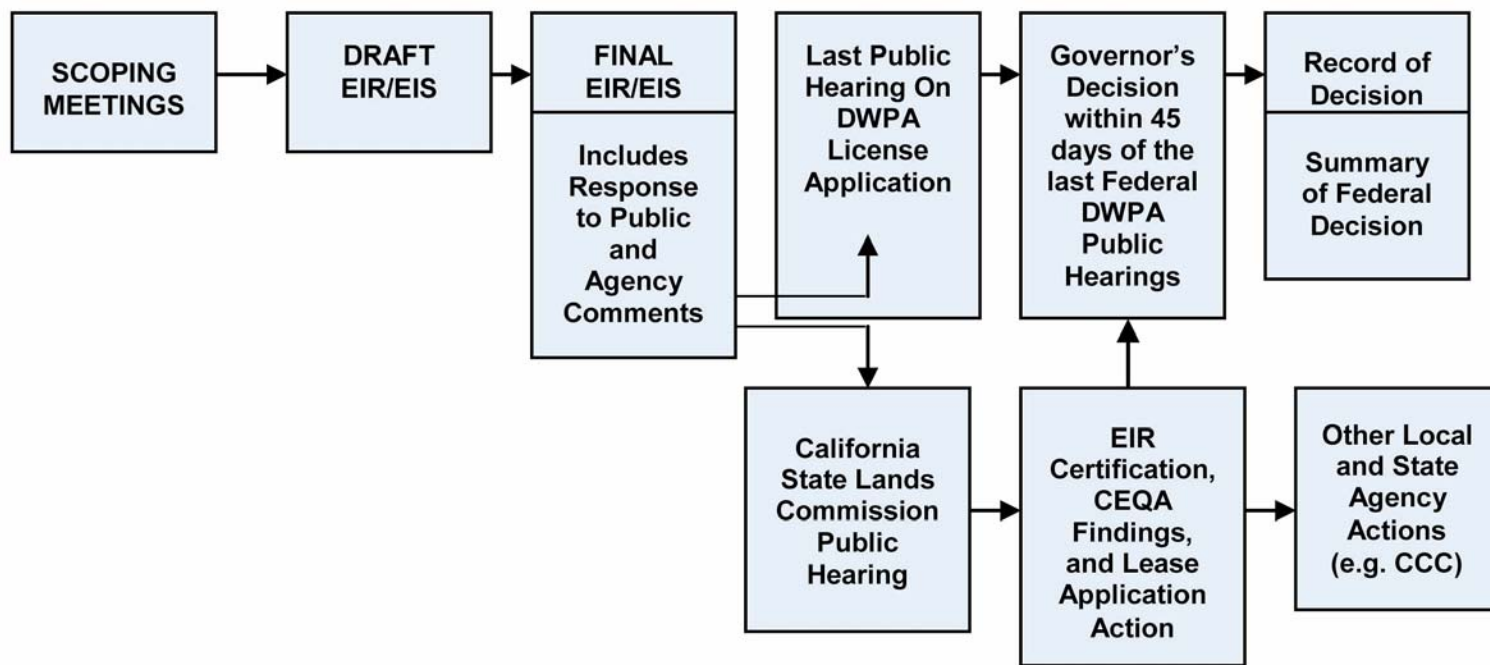
Governor's Decision on Offshore Projects

- Federal law allows Governor to:
 - Approve, approve with conditions, veto, or take no action; applies to offshore projects only
- CEC will provide information to Governor to support his decision
- Governor's decision independent of agency permitting decisions
- CEC working with MARAD to ensure coordination
- Decision on BHP expected mid 2006

Decision Coordination

AGENCY	ACTIVITY	
U.S. Coast Guard & California State Lands Commission	EIS/EIR	
FEDERAL PROCESS		
U.S. Coast Guard/ MARAD	Federal Hearing/Decision on Deepwater Port License	
Other Federal Agencies	U.S. EPA Air & Water Permits, etc.	
GOVERNOR'S DECISION		
Governor's Decision	Approve, Approve With Conditions, Deny, or No Action (presumed approved)	
STATE / LOCAL PROCESS		
California State Lands Commission (CSLC)	Certify Final EIR	
	CSLC Hearing on Lease	
California Coastal Commission (CCC)	Federal Consistency	
	Coastal Development Permit (CDP)	
	Appeal of Local Gov't CDP	
State Coastal Conservancy (SCC)	Lease, if applicable	
Local Government	CDP for shore crossing/onshore pipeline within coastal zone not retained by CCC	

Timeline for Governor's Review (Offshore Projects)



LNG Interagency Working Group

- **22 federal, state, local agencies**
 - Federal: USEPA, USCG, USAF, USMC, US Navy
 - State: CARB, CCC, CEC, CPUC, CSLC, CDF&G, CDF&G/OSPR, OES, DGS, BCDC, Ca Coastal Conservancy, EOB, OPR
 - Local: PoLB, PoHB, County of Ventura, City of Oxnard
- **Meets monthly**
 - Project Updates, Presentations from diverse stakeholders
- **Provide common information to all agencies**

LNG Issues – CEII and SSI

- Critical Energy Infrastructure Information (CEII) and Sensitive Security Information (SSI) not contained in public documents
- State needs CEII/SSI info to assess public safety impacts
- 2005 Energy Act requires FERC to consult with Governor on public safety issues
- FERC/CA have agreed on terms of access to CEII
- Single “umbrella” non-disclosure agreement with FERC to cover state agencies; 67 names in agreement
- Additional agreements required with USCG for access to SSI

LNG Issues – Natural Gas Quality

- Quality measured in terms of Btu content, Wobbe index
- Quality of LNG can differ among foreign sources and can differ from CA standards
 - FERC sets interstate pipeline gas quality standards
 - CPUC sets retail sales gas quality standards
 - ARB sets CNG vehicle gas quality standards
- If gas is “too hot,” it can harm appliances, increase air emissions

Natural Gas Quality (cont.)

- Ongoing efforts to resolve issue
 - SoCalGas joint research study on emissions
 - Natural Gas Working Group
 - ARB reconsidering standard
 - CPUC currently reviewing the issue
- Looking for LNG Developer Commitment
 - LNG gas conditioning at import terminal
 - LNG gas conditioning at export terminal
 - Delivery of LNG from compatible gas field

LNG Issues – Greenhouse Gas (GHG) Emissions

- CPUC has Issued GHG Decision
 - Emission reductions to be set at future date
 - Currently applies to electricity utilities
 - Targets emissions from natural-gas power plants
 - Rulemaking silent on LNG terminals
- GHGs from LNG terminals, tankers, tug
 - Agencies promoting natural gas use rather than diesel
- GHG may be significant issue at some gas fields
 - High levels of CO₂ when gas is extracted

LNG Issues – Other

- International Trade
 - Need Clarity/Symmetry/Certainty in Trade Policies
 - NAFTA addressed US trades in natural gas with Canada, not trades in natural gas with Mexico
 - Actions Underway
 - CEC to discuss with Mexican colleagues
 - Initiating discussions with US DOE
- Open/managed Access

2006 LNG Work Plan

- Areas of Focus
 - Global market issues (trade, supply sources, NG quality)
 - Offshore access issues
 - Mexican import issues
 - Governor's decision package for Cabrillo Port
 - LNG effects of current supply sources & prices
 - Public information opportunities
 - Technical research
 - Legislation review
 - Litigation review